TYPICAL CONSTRUCTION DATA

161kV XLPE Insulated Cable

TPC A046

Conductor			Insulation thickness (min. Ave.)	Metallic Shield		Thickness of sheath (min. Ave.)	Overall dia. (approx.)	Electrical Properties			
Cross Sectional area	Shape	Dia.		Dia. of wire	No. of wires			Max DC conductor resistance at 20℃	AC voltage test for 30 minutes	Min. insulation resistance at 15.6℃	Partial discharge inception voltage
mm²	—	mm	mm	mm	—	mm	mm	Ω/km	kV	MΩ-km	kV
200	Compact Circular	17.0	23	2.0	80	4.5	84	0.0933	240	3700	186
250		19.0	23	2.0	80	4.5	86	0.0754	240	3400	186
325		21.7	23	2.0	80	4.5	89	0.0580	240	3200	186
400		24.1	23	2.0	80	4.5	92	0.0471	240	3000	186
500		26.9	23	2.0	80	4.5	94	0.0376	240	2800	186
600		29.5	23	2.0	80	5.0	98	0.0308	240	2700	186
800	Segmental	34.0	23	2.0	80	5.0	104	0.0231	240	2400	186
1000		38.0	23	2.0	80	5.5	109	0.0187	240	2200	186
1200		41.7	23	2.0	80	5.5	112	0.0156	240	2100	186
1400		45.0	23	2.0	80	5.5	116	0.0133	240	2000	186
1600		48.2	23	2.0	80	5.5	120	0.0117	240	1900	186
1800		51.0	23	2.0	80	6.0	123	0.0104	240	1800	186
2000		53.8	23	2.0	80	6.0	126	0.00933	240	1800	186

Note: The moisture barrier consists of water-blocking tape applied under the copper wire shield and a laminated metal tape integrated into the sheath